

WHAT IS CLAIMED IS:

1 1. A method for encapsulating information in an encoded uniform
2 resource identifier (URI) having a plurality of fields that is presented by a web site to a
3 user for selection during an interaction session between the web site and the user, the
4 method comprising steps of:
5 choosing a URI field for encapsulating the information;
6 determining first information that comprises at least one of second
7 information and third information, wherein the third information is unrelated to the
8 interaction session;
9 formatting fifth information related to the first information to create sixth
10 information;
11 embedding the sixth information in the field to form the encoded URI; and
12 presenting the encoded URI to the user.

1 2. The method for encapsulating information in the encoded URI
2 having the plurality of fields that is presented by the web site to the user for selection
3 during the interaction session between the web site and the user as recited in claim 1,
4 further comprising steps of:
5 compressing the first information to create the third information; and
6 encrypting the third information to create the fourth information.

1 3. The method for encapsulating information in the encoded URI
2 having the plurality of fields that is presented by the web site to the user for selection
3 during the interaction session between the web site and the user as recited in claim 1,
4 wherein a size of the encoded URI is limited to a range of about 4K to 8K characters.

1 4. The method for encapsulating information in the encoded URI
2 having the plurality of fields that is presented by the web site to the user for selection
3 during the interaction session between the web site and the user as recited in claim 1,
4 wherein the formatting step comprises formatting fourth information in base 64 to create
5 sixth information.

1 5. The method for encapsulating information in the encoded URI
2 having the plurality of fields that is presented by the web site to the user for selection
3 during the interaction session between the web site and the user as recited in claim 1,

4 further comprising a step of encrypting third information related to the first information to
5 create the fourth information, wherein the encrypting step uses at least one of: code table
6 encryption, symmetric key encryption, and asymmetric key encryption.

1 6. The method for encapsulating information in the encoded URI
2 having the plurality of fields that is presented by the web site to the user for selection
3 during the interaction session between the web site and the user as recited in claim 1,
4 further comprising a step of compressing the first information to create the third
5 information, where the compressing step uses at least one of: gzip compression, zlib
6 compression, run length encoding, and Huffman encoding.

1 7. The method for encapsulating information in the encoded URI
2 having the plurality of fields that is presented by the web site to the user for selection
3 during the interaction session between the web site and the user as recited in claim 1,
4 wherein the third information is gathered by the web site for the benefit of another web
5 site indicated by the encoded URI.

1 8. The method for encapsulating information in the encoded URI
2 having the plurality of fields that is presented by the web site to the user for selection
3 during the interaction session between the web site and the user as recited in claim 1,
4 wherein the second information includes at least one of: a user identifier, a user
5 authorization password, an association for the user, a credit amount associated with the
6 user, cost quoted for a resource indicated by the encoded URI, rights associated with the
7 user for content, the URI field if the URI field is replaced in the encoded URI.

1 9. The method for encapsulating information in the encoded URI
2 having the plurality of fields that is presented by the web site to the user for selection
3 during the interaction session between the web site and the user as recited in claim 1,
4 wherein the third information includes at least one of: an expiration for the encoded URI,
5 mirror sites for a resource indicated by the encoded URI, an identifier indicating the web
6 site that built the encoded URI, and status information for the web site.

1 10. The method for encapsulating information in the encoded URI
2 having the plurality of fields that is presented by the web site to the user for selection
3 during the interaction session between the web site and the user as recited in claim 1,

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4 further comprising a step of analyzing the first information to determine if the encoded
5 URI has expired.

1 11. A method for encapsulating information in an encoded uniform
2 resource identifier (URI) having a plurality of fields that is presented by a web site to a
3 user for selection during an interaction session between the web site and the user, the
4 method comprising steps of:

- 5 choosing a URI field for encapsulating the information;
- 6 determining first information that comprises at least one of second
7 information and third information;
- 8 compressing the first information to create the fourth information;
- 9 encrypting the fourth information to create the fifth information;
- 10 formatting fifth information to create sixth information;
- 11 embedding the sixth information in the field to form the encoded URI; and
12 presenting the encoded URI to the user.

1 12. The method for encapsulating information in the encoded URI
2 having the plurality of fields that is presented by the web site to the user for selection
3 during the interaction session between the web site and the user as recited in claim 11,
4 wherein the third information is unrelated to the interaction session.

1 13. A method for decoding information in an encoded uniform
2 resource identifier (URI) having a plurality of fields that is presented to a web site by a
3 user where the encoded URI is produced during an interaction session between a referring
4 web site and the user, the method comprising steps of:

- 5 determining a URI field that encapsulates sixth information;
- 6 removing the sixth information from the URI field; and
- 7 unformatting the sixth information to produce fifth information related to
8 first information, wherein:
 - 9 the first information comprises at least one of second and third
10 information, and
 - 11 the third information is unrelated to the interaction session.

1 14. A uniform resource identifier (URI) embodied in a carrier wave,
2 comprising:

3 a scheme segment comprising a scheme for parsing the URI;
4 a scheme-specific segment comprising a payload portion and at least one
5 of:
6 a host identifier,
7 path information, and
8 a file name, wherein the payload portion includes information that
9 is at least one of formatted, compressed and encrypted.

1 15. The URI embodied in the carrier wave as recited in claim 14,
2 wherein the information is both compressed and encrypted.

1 16. The URI embodied in the carrier wave as recited in claim 14,
2 wherein the information is unrelated to an interaction session between a web site that built
3 the URI and a user that selected the URI.

1 17. The URI embodied in the carrier wave as recited in claim 14,
2 wherein the information is gathered by a web site that built the URI for the benefit of
3 another web site indicated by the host identifier.

1 18. The URI embodied in the carrier wave as recited in claim 14,
2 wherein the information includes user-related information.